DOCUMENT RESUME

ED 294 947 UD 026 175

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TITLE An Evaluation of Chapter I in the Montgomery County Public Schools. Chapter I Students in the Montgomery County Public Schools: A Description and Follow-up.
INSTITUTION Montgomery County Public Schools, Rockville, Md.
SPONS AGENCY Office of Educational Research and Improvement (ED), Washington, DC.
PUB DATE Mar 87
CONTRACT NIE-R-85-0015
NOTE 45p.; Prepared by the Department of Educational Accountability.
PUB TYPE Reports - Research/Technical (143)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS *Academic Achievement; *Achievement Gains; Cohort Analysis; Elementary Secondary Education; *Mainstreaming; Mathematics Achievement; Reading Achievement; Scores; Special Education; Suspension
IDENTIFIERS *Education Consolidation Improvement Act Chapter 1; *Montgomery County Public Schools MD

ABSTRACT

In the Montgomery County Public Schools in Maryland the Chapter 1 program is atypical in that the mainstream model is used. Students remain in their classrooms for Chapter 1 instruction, which they receive along with regular instruction. This model is increasingly recognized by other districts as an alternative to the more widely used pull-out approach. A study of the progress of Chapter 1 students was conducted in 1985-86. The group under study were students who had received Chapter 1 in grades K, 1, and 3 in 1979-80. This group was compared to other students in the grade cohort who had not received Chapter 1 services. The findings included the following: (1) most of these students had not needed special education services, those who did needed low levels of service; (2) the performance of the Chapter 1 students on statewide reading and mathematics tests was similar to that of ninth graders throughout the state but lower than that of ninth graders in the district; (3) the target group performed below grade level on criterion-referenced tests; (4) the suspension rate for the Chapter 1 students was over twice that of other students in their cohort; and (5) the Chapter 1 students experienced other problems, in areas such as achievement, speech and language, listening and social or emotional adjustment. Statistical data are provided on tables. (VM)

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MONTGOMERY COUNTY
PUBLIC SCHOOLS
ROCKVILLE, MARYLAND

An Evaluation of Chapter I in the Montgomery County Public Schools

Submitted to
Office of Educational Research and Improvement
U.S. Department of Education
Pursuant to RFP No. NIE-R-85-0015

March 1987

U.S. DEPARTMENT OF EDUCATION
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MONTGOMERY COUNTY PUBLIC SCHOOLS
Rockville, Maryland

CHAPTER I STUDENTS IN THE MONTGOMERY COUNTY PUBLIC SCHOOLS: A DESCRIPTION AND FOLLOW-UP

by

Rita J. Kirshstein

Submitted to
Office of Educational Research and Improvement
U.S. Department of Education

Pursuant to RFP No. NIE-R-85-0015

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EXECUTIVE SUMMARY

CHAPTER I STUDENTS IN THE MONTGOMERY COUNTY PUBLIC SCHOOLS: A DESCRIPTION AND FOLLOW-UP

INTRODUCTION

In December of 1983, Congress passed the technical amendments to Chapter I of the Education and Consolidation Improvement Act of 1981. These amendments included a requirement that the National Institute of Education assess the status of compensatory education as provided through Chapter I. This study of Chapter I services in the Montgomery County Public Schools (MCPS) is part of the national evaluation effort. Funded by the Office of Educational Research and Improvement, this evaluation is one of six being conducted to determine how Chapter I operates at the local level and to describe the later educational status of students who received Chapter I services.

CHAPTER I IN MONTGOMERY COUNTY

Chapter I is a federally funded program which is part of the Education Consolidation and Improvement Act of 1981. This program replaced Title I of the Elementary and Secondary Education Act of 1965. Chapter I provides financial assistance to local school districts for the implementation of programs for educationally disadvantaged students. The State of Maryland also provides funds to students in schools eligible to receive Chapter I assistance but because of limited federal funds are not being served.

Chapter I in Montgomery County is atypical in that a mainstream model is used. That is, students remain in their regular classrooms for instruction, and instructional assistants work in conjunction with the regular classroom teacher in providing the regular MCPS curriculum to the Chapter I students. This model, which has been used for over ten years in MCPS, is becoming increasingly recognized by other educational districts and providers as a preferable alternative to the more widely used pull-out approach.

The 1986-87 Chapter I program in MCPS serves approximately 3100 kindergarten through fourth grade students in 24 public elementary schools and three nonpublic elementary schools. In addition, 900 students in nine MCPS schools are served with state compensatory education funds.

THE STUDY

This study describes the progress of students who participated in Chapter I (then Title I) during the 1979-80 school year in Grades K, 1, and 3. Altogether, there were 509 kindergarten students, 499 first grade students, and 491 third grade students who received Title I services in that school year.

Information from existing data bases and tapes within MCPS were used to put together a profile of Chapter I students and all other students in the school system who were born in the same year as the Chapter I students. In

addition, students' school records were reviewed for a subsample of 100 kindergarten and 100 third grade students.

It was originally hoped that the progress of Chapter I students would be compared with that of a similar population of academically needy students who did not receive Chapter I supports. However, due to data constraints it was not possible to select such a control group. Thus, we cannot draw firm conclusions about the progress of Chapter I participants as compared to a similar but unserved population. The data in this report nonetheless provide a rich and useful description of the current status of Chapter I graduates in MCPS. Further, by highlighting both the strengths and weaknesses of Chapter I participants (as compared to other MCPS students, or some national or State reference group), the data provide program managers with valuable information for the targeting of services and program improvements.

FINDINGS

Participation

Analysis of participation data show that the vast majority of Chapter I students receive services for a fairly limited amount of time (one to two years) and are able to function in the regular MCPS program, with no or limited special services, once they have been returned to it. Specifically,

- Forty-eight percent of the students in the kindergarten cohort and 33 percent of the students in the Grade 1 cohort required Chapter I services for only one year. Approximately 25 percent of the students in the two cohorts required services for two years.

- Ninety percent of the students in each of the three cohorts who were returned to the regular program remained there and did not require Chapter I services at a later point in time.

- The majority of Chapter I students did not require any supplemental special education services while in MCPS. Those who did require such help did so primarily at the lower levels of service, indicating less severe problems.

Academic and Behavioral Outcomes

The data provide a mixed picture with regard to academic and behavioral outcomes. By national standards, the students are succeeding and perform about as well as the average student nationally on measures of academic performance several years after leaving the program. These are impressive accomplishments for students initially scoring below the third stanine on a similar achievement test. The Chapter I students fall short, however, of meeting the exceptionally high performance standards of the MCPS student population. And, there remain a number of areas in which improvements could be made. Specifically,

- Chapter I students performed close to the national norm on the California Achievement Tests. Further, there is a trend of increasing test performance over time. However, their scores were substantially below those of MCPS students of the same age.

- The passing rate for Chapter I students who took the Maryland Functional Reading and Mathematics Tests as ninth graders in the fall of 1985 was similar to that of ninth graders taking the test throughout the state. However, their performance fell below that of other ninth graders taking the test in MCPS.

- Performance on MCPS criterion-referenced reading and math tests indicate that a substantial portion of the kindergarten and Grade 1 cohort students were not performing at grade level and,

  1. Compared to the other students in their grade cohort, twice as many Chapter I students were tested below their grade level on the end of year tests.

  2. Chapter I students also scored lower on both tests than their age cohorts in MCPS.

- Student records indicated that over half the students had some general academic problems as well as problems with work/study skills.

- Approximately one-third of the students in the kindergarten and Grade 1 cohorts had been retained for at least one year. Comparative data for the Grade 3 Chapter I students are not available.

- Subsample analyses (record reviews) indicated that over half the students from the third grade cohort who were in ninth grade in 1985-86 had grade point averages below 2.0 for that year (scale 0-4).

- The suspension rate for Chapter I students was over twice that of other MCPS students of similar ages.

- Subsample analyses also show that many Chapter I students were absent from school in excess of 20 days a year.

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CHAPTER I STUDENTS IN THE MONTGOMERY COUNTY PUBLIC SCHOOLS: A DESCRIPTION AND FOLLOW-UP

INTRODUCTION

In December of 1983, Congress passed the technical amendments to Chapter I of the Education and Consolidation Improvement Act of 1981. These amendments included a requirement that the National Institute of Education assess the status of compensatory education as provided through Chapter I. This program evaluation mandate was broad based, directed at examining the program in terms of its administration, content, and effectiveness.

This study of Chapter I services in the Montgomery County Public Schools (MCPS) is part of the national evaluation effort. Funded by the Office for Educational Research and Improvement, this evaluation is one of six being conducted to determine how Chapter I operates and affects students at the local level.[1]

The School System

The Montgomery County Public School system (MCPS), located in the Washington metropolitan area, serves approximately 93,000 students in Grades K through 12. MCPS is the third largest school system in the state of Maryland and one of the nation's 20 largest. While the system is generally considered to be a suburban district, within its 500 square miles there are areas which vary from the rural to the urban.

The county also serves a student population that is varied in racial/ethnic background. In the 1986-87 school year, the student population was 69 percent white, 15 percent black, 10 percent Asian, 6 percent Hispanic, and .1 percent American Indian. Over the last several years, there has been a steady increase in the proportion of minority students in the overall population as well as an increase in the number of students from non-English speaking homes. Approximately 15 percent of the students participate in the free lunch program.

The Chapter I Program

Chapter I is a federally funded program which is part of the Education Consolidation and Improvement Act of 1981. This program replaced Title I of the Elementary and Secondary Education Act of 1965. Chapter I provides financial assistance to local school districts for the implementation of programs for educationally disadvantaged students.

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1. The other five evaluations funded are: the Columbus, Ohio, Public Schools; the Mesa, Arizona, Public Schools; the Washington State School System; the Pennsylvania State School System; and Research and Training Associates who are using Lincoln, Nebraska, and St. Louis, Missouri, as research sites.

In addition to federal funding, the state of Maryland provides assistance to local school districts through the State Compensatory Education Program. This is a 100 percent state-funded program which provides services to educationally disadvantaged students in schools eligible to receive Chapter I assistance but because of limited federal funds are not being served. This program is administered through the Chapter I office and operates in the same manner as the federally funded program.

Chapter I in Montgomery County is atypical in that a mainstream model is used. That is, students remain in their regular classrooms for instruction, and instructional assistants work in conjunction with the regular classroom teachers in providing the regular MCPS curriculum to the Chapter I students. This model, which has been used for over ten years in MCPS, is becoming increasingly recognized by other educational districts and providers as a preferable alternative to the more widely used pull-out approach.

The 1986-87 Chapter I program in MCPS serves approximately 3100 kindergarten through fourth grade students in 24 public elementary schools and three nonpublic elementary schools. Another 900 students in nine MCPS schools are being served with State Compensatory Education funds.[2]

Table 1 presents the numbers of students served by Chapter I (Title I) since 1979-80 broken down by type of service and race.

In the past seven school years, no major changes have occurred in the size of the program. The number of students served has ranged between 2911 in 1982-83 and 3818 in 1980-81. (It should be noted that in 1982-83, Chapter I dropped services to fifth grade students who had been served up to that point and began focusing on kindergarten through fourth grade students only.) Students have received predominantly reading or both reading and math services. The proportion of students receiving math services only increased slightly between 1979-80 and 1984-85 (from 15 to 24 percent) but dropped to a low of 11.9 percent in the 1985-86 school year.

The percentage of the MCPS student population in those grades served by Chapter I who have been in the program has remained fairly steady between 1979-80 and 1985-86, with approximately 10 percent of all MCPS students in Grades K through 4 or 5 receiving Chapter I assistance in any given year. The racial breakdown of students in the program indicates a slight decline in the percentage of white students participating in Chapter I and a slight increase in the proportion of Asian and Hispanic students receiving services over this time period.

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2. No distinction will be made between the Chapter I and State Compensatory Education programs. From here on, both programs will be referred to as Chapter I.

TABLE 1
Chapter I Participants in MCPS:
1979-1985*

	1979-1980	1980-1981	1981-1982	1982-1983**	1983-1984	1984-1985	1985-1986
Chapter I Participants	3318	3818	3113	2911	3257	3759	3587
Reading/ Reading & Math***	2814	3039	2559	2120	2391	2869	3159
Math Only	504	779	554	791	866	890	428
	Percentage						
MCPS Students in Chapter I****	8.5	10.4	9.0	10.6	11.7	12.9	11.5
Race							
White	47.2	48.7	42.5	40.7	39.1	37.7	35.3
Black	35.0	32.5	32.6	32.1	32.6	33.9	33.0
Hispanic	9.2	9.9	13.4	14.9	16.5	16.4	18.5
Asian	7.5	8.7	11.3	12.1	11.5	11.5	13.1
Amer. Indian/ Alaskan Native	1.1	.3	.2	.2	.2	.4	.1

* This table includes Chapter I students as well as students funded by the State Compensatory Education Program. Since there are no differences in the operation of these two programs, no distinction will be made between Chapter I and State Compensatory Education in subsequent tables.

**In 1982-83, MCPS dropped Chapter I services to fifth grade students.

***The Chapter I program in MCPS does not report separately those students being served for reading services only and those receiving both reading and math services.

****The percentages in this row are calculated on the number of MCPS students in those grades served by Chapter I.

FINDINGS

Analysis Strategy

The aim of the present study was to provide a picture of the long-term effects of Chapter I participation. As Datta (1986) states, there are several standards against which such effects can be measured.

- Relative gains. Did participants progress more rapidly than would be expected for similar children who had not participated?
- Closing the gap. Did the participants progress more rapidly than more advantaged children so that the gap between participants and more advantaged children closed?
- Levels achieved. Regardless of relative changes, did participants reach levels of achievement likely to indicate acceptable or better ability to be independent, contributing members of society?

It was originally hoped that the standard of relative gains could be used in this study and that the progress of Chapter I students could be compared with that of a similar population of academically needy students who did not receive Chapter I supports. However, due to data constraints it was not possible to select such a control group. Instead, standards which are very similar to Datta's "closing the gap" and "levels achieved" have been applied. First, where possible data for other MCPS students or for a national or state group are used for comparative purposes. Second, where such data are not available, findings for Chapter I participants are presented in a stand-alone fashion and their implications discussed. The interpretations we offer are based on experience and professional judgment.

Clearly these standards are less satisfactory than that of relative gains, and each answer a different question. Nonetheless we feel they provide a useful context for looking at Chapter I performance. Even though some critical questions remain unanswerable, the data in this report offer a very rich description of the MCPS population and its accomplishments; they provide program managers and policy makers with valuable information for the targeting of services and program improvements.

Information from existing data bases and tapes within MCPS were used to put together a profile of Chapter I students[3] and all other students in the school system who were born in the same year as the Chapter I students. These data include: participation in Chapter I in subsequent years;

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3. From this point on, the program will be referred to as "Chapter I" even though the program was officially called "Title I" for part of the period being studied.

participation in Head Start; participation in special education programs; scores on California Achievement Tests, MCPS criterion-referenced tests,[4] and Maryland functional tests;[5] school history information; and suspensions. In addition, students' school records were reviewed for 99 of the kindergarten students and 94 of the third grade students. Data gathered from these record reviews provide information on attendance, report card grades, academic and social problems, and participation in other MCPS programs.

Chapter I Participants

This study follows the progress of students who participated in Title I services in MCPS during the 1979-80 school year in Grades K, 1, and 3. Altogether, there were 509 kindergarten students, 499 first grade students, and 491 third grade students who received Title I services in that school year. The selection of the 1979-80 school year allows for a six-year follow-up of the students in the three samples.

In all three cohorts, white students are considerably underrepresented and black students overrepresented relative to their representation in the overall MCPS student population in 1979-80 (Table 2). Hispanic and Asian students are only slightly overrepresented in the three groups.

A somewhat higher percentage of males than females participated in Chapter I in Grades K, 1, and 3 in 1979-80.

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4. The criterion-referenced tests are locally developed tests designed to measure student performance on the MCPS reading and mathematics curriculum. These tests are given annually at the end of each school year to students in Grades 1 through 8.

5. The Maryland functional tests are state-mandated minimum competency tests that are being phased in as requirements for graduation in the State of Maryland. These tests are first administered in the seventh grade in order to identify students who will probably need help in order to pass the test. Beginning in the ninth grade, students take the functional tests each fall and spring until a passing score is received. At this point, functional reading tests are required of students who graduated in 1986 and both functional reading and math tests will be required of students graduating in 1987.

TABLE 2
Race and Sex of the Chapter I Cohorts

	Kindergarten Cohort (N=509)	Grade 1 Cohort (N=499)	Grade 3 Cohort (N=491)	All MCPS: 1979-80
	Percentage			
RACE				
Asian	11	7	6	5
Black	31	31	28	11
Hispanic	10	8	7	3
White	41	46	53	80
Missing*	7	8	6	-
SEX				
Male	53	54	55	-
Female	47	46	45	-

*Information on race was obtained from the MCPS school history data base which only goes back to the 1980-81 school year. Those students who were in Chapter I in 1979-80 but who were not students in MCPS in 1980-81 or any other subsequent years are missing data on race.

Almost 40 percent of the kindergarten and grade 1 cohort students had participated in Head Start prior to entering Chapter I and a fourth of the grade 3 students had been in the Head Start program. (Table 3)

TABLE 3
Head Start Participation of Chapter I Students*
(Percentage Who Had Participated in Head Start)

Kindergarten Cohort	Grade 1 Cohort	Grade 3 Cohort
39.5	39.9	25.1

* Data on Head Start participation are derived from two different sources within MCPS. For first and third grade students, information on Head Start comes from the student data base which has a considerable amount of missing data. Data for the kindergarten cohort were taken directly from records in the Head Start office for use in a study on Head Start that used students participating in the program in 1978-79.

Because this study follows these 1979-80 Chapter I participants over the next six school years, the issue of sample attrition is of particular importance. Table 4 presents the attrition by year of the three Chapter I cohorts.

A similar attrition rate occurs in all three cohorts. Slightly over two thirds of the original 1979-80 sample remained in MCPS in the 1985-86 school year. The attrition rate for Chapter I students from the 1980-81 school year to the 1985-86 school year is similar to that for all MCPS students of the same age who were in the system from 1980 onward.[6] Adequate numbers of Chapter I students thus remained each year for purposes of analysis.[7]

TABLE 4
Attrition of Chapter I Students in MCPS

	Kindergarten Cohort		Grade 1 Cohort		Grade 3 Cohort	
	No.	Percentage Remaining in MCPS	No.	Percentage Remaining in MCPS	No.	Percentage Remaining in MCPS
YEAR						
1979-80	509	100	499	100	491	100
1980-81	465	91.4	458	91.8	456	92.9
1981-82	416	81.7	413	82.8	411	83.7
1982-83	375	73.7	386	77.4	385	78.4
1983-84	362	71.1	370	74.1	371	75.6
1984-85	351	69.0	349	69.9	353	71.9
1985-86	341	67.0	337	67.5	344	70.1

6. The attrition rate for the two groups can only be compared from the 1980-81 school year and not from 1979 since the MCPS data base began in that year. There is no reason to believe, however, that attrition between 1979-80 and 1980-81 would be any different for Chapter I students and MCPS students of the same ages.

7. Characteristics of students who were in MCPS in 1979 in all three cohorts were compared with those students from these cohorts who were still in MCPS in the 1985-86 school year. There were no major differences between these two groups in terms of sex, race, and test scores. Thus, those who left MCPS appear not to be different from those who remained in the school system. Any analysis on students remaining in MCPS in subsequent years probably reflects the entire group of students.

Program Participation

Most students participated in Chapter I for one or two years. The overwhelming majority of students remained in the program for consecutive years and were able to remain in the regular classroom once they no longer required Chapter I services.

In the 1979-80 school year, criteria for determining eligibility for participation in Chapter I differed from the criteria currently being used. Kindergarten students were administered the Peabody Picture Vocabulary Test (Form A) and were considered eligible for Chapter I services if their mental age score was six months or more below their chronological age. First grade students were given the Stanford Early School Achievement Test and students scoring below the third stanine on Math or Reading were considered eligible for the program. Third grade students took the Iowa Tests of Basic Skills (Form 6) and, like first graders, were eligible for Chapter I services if they scored below the third stanine on either the Reading or Math subtests. Teachers could request an exception if a student scored above these cutoff points and she/he justified why that student needed Chapter I services.

As is the case in the current program, students in the Chapter I program were also tested at the end of the school year in order to determine what progress had been made. Students participating a second year were once again pretested in the fall in order to determine eligibility. Thus, if a student scored above the designated cutoff, he/she would no longer receive Chapter I services even if that student was in the program the prior school year.

Participation in Chapter I for the students in the three cohorts is presented in Tables 5-A, 5-B, and 5-C.

Almost 90 percent of the students in all three groups were in Chapter I for either one year, two consecutive years, three consecutive years, or four or five consecutive years. Only about 10 percent of the students in each of the three cohorts were out of Chapter I for a year or more and returned to the program at a later point in time.

The percentage of students participating in Chapter I for only one year decreased from 47.7 in the kindergarten cohort to 32.7 in the first grade cohort to 23.2 in the third grade cohort. The somewhat higher percentage of students who were in Chapter I for only one year in the kindergarten cohort can perhaps be explained by the difficulties encountered in testing children this young and by the problems experienced with the Peabody Picture Vocabulary Test as a screening instrument.[8] This finding does suggest that the Chapter I program in Montgomery County does not hold onto students who no longer need its services.

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8. The Chapter I program stopped using the Peabody Picture Vocabulary Test in the 1980-81 school year. It proved to be an inadequate screening instrument and it did not correlate with later tests such as the California Achievement Tests which students take in Grades 3 and 5.

TABLE 5-A
Chapter I Participation: Kindergarten Cohort
(N=509)

1979-80	1980-81	1981-82	1982-83	1983-84	Percentage
+	o	o	o	o	47.7
+	+	o	o	o	21.8
+	+	+	o	o	8.1
+	+	+	+	o	3.7
+	+	+	+	+	8.1
+	o	+	o	o	1.8
+	o	o	+	o	.4
+	o	o	o	+	1.2
+	o	+	+	o	1.0
+	o	o	+	+	1.6
+	+	o	+	o	1.8
+	+	o	o	+	.4
+	o	+	+	+	.6
+	+	+	o	+	.8
+	+	o	+	+	1.2
% of Cohort in MCPS in Ch. I 100%	50.1%	29.3%	24.8%	19.3%	

NOTE: A "+" indicates Chapter I participation for a given year.
A "o" indicates no participation in Chapter I for that year.

TABLE 5-B
Chapter I Participation: Grade 1 Cohort
(N=499)

1978-79	1979-80	1980-81	1981-82	1982-83	Percentage
o	+	o	o	o	32.7
o	+	+	o	o	16.2
o	+	+	+	o	6.2
o	+	+	+	+	9.4
+	+	+	+	+	5.0
+	+	o	o	o	9.4
o	+	o	+	o	.8
o	+	o	o	+	1.2
+	+	+	o	o	6.8
o	+	o	+	+	1.4
o	+	+	o	+	2.6
+	+	o	+	o	.6
+	+	o	o	+	1.8
+	+	+	+	o	4.0
+	+	+	o	+	1.4
+	+	o	+	+	.4
% of Cohort in MCPS in Chapter I	100%	56.3%	33.7%	30.1%	

TABLE 5-C
Chapter I Participation: Grade 3 Cohort*
(N=491)

1976-77	1977-78	1978-79	1979-80	1980-81	1981-82	Percentage
?	o	o	+	o	o	23.2
?	o	o	+	+	o	9.8
?	o	o	+	+	+	13.0
?	o	+	+	+	+	8.8
?	+	+	+	+	+	8.6
?	o	+	+	o	o	8.4
?	o	o	+	o	+	2.6
?	+	o	+	o	o	2.9
?	o	+	+	+	o	7.3
?	+	+	+	o	o	6.9
?	o	+	+	o	+	.6
?	+	o	+	+	o	1.4
?	+	+	+	+	o	3.9
?	+	o	+	+	+	2.4
?	+	+	+	o	+	.2
% of Cohort in MCPS in Chapter I			100%	55.2%	36.3%	

*Data on participation in Chapter I in 1976-77 were not available.

The total number of years students participated in Chapter I in the kindergarten and grade 1 cohorts is summarized in Table 6.

TABLE 6
Number of Years in Chapter I*

Number of Years in Chapter I	Kindergarten Cohort	Grade 1 Cohort
	Percentage	
1	47.7	32.7
2	25.2	27.6
3	12.9	19.4
4	6.3	15.2
5	8.1	5.0

* Data on students in the third grade cohort are not included in this table because information on participation in Chapter I for the 1976-77 school year, the year these students would have been in kindergarten, are not available.

Participation in MCPS Special Education Programs

Data were examined to determine whether or not Chapter I students participated in other MCPS programs such as special education programs.

Data on the participation of Chapter I students in special education programs in MCPS indicate that the majority of Chapter I students had not received special education services. Those who had participated in special education programs had done so primarily at the lower levels of service, indicating less severe problems.

Special education services to students in Montgomery County can be categorized along two dimensions: the level of service the student receives and the problem for which the student receives service. Level of service is based on the setting in which the service is delivered (i.e., regular classroom, resource room, special classroom, special school, home or hospital); the nature of the service (i.e., direct, consultative, monitoring, or assessment); and the frequency of the service. The levels of service which MCPS offers are defined as follows:

Level 1 - Assessment, consultation, and providing special materials to regular classroom teachers

Level 2 - Direct service to a student on an intermittent or regular basis

Level 3 - Direct service to a student on a continuous basis for at least one hour a day

Level 4 - Self-contained special education class within a general education facility

Level 5 - Special class placement for entire school day in a special school or special wing of a school

Level 6 - Instruction provided on a short- or long-term basis in a residential setting

Level 7 - Instruction provided in the student's home or hospital

During a school year, students can receive special education services for more than one problem (e.g., speech and learning disability) and thus be classified as receiving services on more than one level. Tables 7-A, 7-B, and 7-C indicate the highest level of service students in each of the three cohorts received each year for the period between the 1980-81 and 1985-86 school years. Table 8 summarizes the highest level of special education service ever received by the Chapter I students while enrolled in MCPS.

While slightly less than half of all of the students in the kindergarten cohort never received special education services, slightly over half of the Grade 1 cohort and over two-thirds of the third grade cohort never participated in special education programs. Given the population that Chapter I serves--low-income, low-achieving students--the proportion of students who never received special education services or who did so at low levels must be considered high.

These data also indicate that the majority of the students in the three Chapter I cohorts who did receive special education services did so at Levels 1, 2, and 3. Those students who required a self-contained classroom (Level 4) were the minority.

For those Chapter I students who did receive special education services while in MCPS, the predominant types of problems for which they needed services were learning disabilities and speech and language difficulties. The problems for which Chapter I students received services are presented in Tables 9-A, 9-B, and 9-C.

TABLE 7-A
Special Education Levels by Year: Kindergarten Cohort

	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86
	Percentage					
None	57.4	51.9	53.6	59.4	59.5	61.0
Level 1	.6	3.6	4.0	1.9	2.6	1.7
Level 2	25.6	16.3	14.4	10.5	7.7	8.5
Level 3	13.1	22.4	17.9	13.0	14.5	10.9
Level 4+	3.2	5.8	10.1	15.2	15.7	17.9
Number of Chapter I Cohort Students in MCPS	465	416	375	362	351	341

TABLE 7-B
Special Education Levels by Year: Grade 1 Cohort

	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86
	Percentage					
None	62.2	61.5	63.5	63.8	66.5	68.8
Level 1	0	2.2	2.6	2.4	2.6	2.4
Level 2	17.0	14.8	12.2	11.6	9.7	8.3
Level 3	18.1	16.9	15.0	12.7	10.6	9.5
Level 4+	2.6	4.6	6.7	9.5	10.6	11.0
Number of Chapter I Cohort Students in MCPS	458	413	386	370	349	337

TABLE 7-C
Special Education Levels By Year: Grade 3 Cohort

	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86
	Percentage					
None	79.4	73.5	75.6	81.4	77.3	82.0
Level 1	0	2.9	1.6	1.3	4.0	.9
Level 2	10.3	8.3	7.8	4.8	6.2	4.4
Level 3	8.1	12.2	10.9	8.1	8.5	7.6
Level 4+	2.2	3.2	4.1	4.3	4.0	5.2
Number of Chapter I Cohort Students in MCPS	456	411	385	371	353	344

TABLE 8
Highest Level of Special Education Service Received in MCPS

	None	Level 1	Level 2	Level 3	Level 4+
	Percentage				
Kindergarten Cohort	45.8*	3.1	13.9	22.6	14.5
Grade 1 Cohort	52.5	2.0	12.8	22.8	9.8
Grade 3 Cohort	69.0	2.4	7.7	15.5	5.2

* Percentages in this table are calculated on the basis of the total number of students in the cohort, not on the number of students in MCPS in any given school year as is the case in Tables 7-A, 7-B, and 7-C.

TABLE 9-A
Types of Special Education Problems:
Kindergarten Cohort

	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86
	Percentage					
Learning Disabled	24.7	31.5	30.7	25.7	26.5	25.5
Language	8.8	8.4	6.1	4.3	2.9	4.7
Speech	3.9	2.2	2.4	1.4	1.1	.9
L.D./Language	3.6	1.4	2.1	.8	.8	-
L.D./Speech	.4	.2	.3	.6	-	-
Other	1.2	4.4	4.8	7.4	9.2	7.9

TABLE 9-B
Types of Special Education Problems:
Grade 1 Cohort

	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86
	Percentage					
Learning Disabled	27.9	29.0	28.2	27.0	24.6	23.4
Language	3.9	3.4	3.1	2.2	2.3	2.7
Speech	1.3	1.9	2.3	1.4	1.4	.6
L.D./Language	3.5	1.9	.3	.5	.8	.3
L.D./Speech	.4	.2	.5	1.1	.3	-
Other	.2	2.1	2.1	4.0	4.1	4.2

TABLE 9-C
Types of Special Education Problems:
Grade 3 Cohort

	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86
	Percentage					
Learning Disabled	17.5	21.2	21.0	15.4	19.3	14.2
Language	.6	.7	.5	.3	.6	.3
Speech	1.3	1.7	.8	.3	-	-
L.D./Language	.2	-	-	-	-	-
L.D./Speech	.4	.2	.3	-	-	.3
Other	.6	2.7	1.8	2.6	2.8	3.2

Academic and Behavioral Outcomes

Analyses of academic outcomes looked at performance on three types of tests: the California Achievement Tests, the MCPS Criterion-Referenced Tests, and the Maryland Functional Tests. In addition, data on retentions and suspensions were also examined.

California Achievement Tests

The scores of Chapter I students on the California Achievement Tests indicate that those students tested performed close to the norm nationally. The average Normal Curve Equivalent (NCE)[9] scores on the Math, Language, and Reading subtests, as well as the average total score, were close to 50 for third, fifth, and eighth grade administrations of the test. This is an impressive accomplishment for students initially scoring below the third stanine on a similar achievement test. The scores of Chapter I students, however, were substantially below those of MCPS students of the same ages. It should be noted that MCPS is a high achieving school system when compared to other school systems. Thus, the scores of the Chapter I students are respectable on a national scale even though they were lower than those of MCPS students in general.

9. NCEs divide the normal distribution into 99 segments , units, or scores. Scores range from 1 to 99, with a mean/median of 50.

MCPS students take the California Achievement Tests in Grades 3, 5, 8, and 11. The performance of Chapter I students on these tests is thus available if they were still in MCPS at the time the test was administered. Tables 10-A, 10-B, and 10-C present mean NCE scores on the California Achievement Tests by sex, race, and the number of years that Chapter I services were received for the students in the three cohorts and for those MCPS students of similar ages.

Generally, there are little or no differences in scores on any of the subtests between males and females in Chapter I. Asian students tended to outperform other students, particularly on the math subtest.[10] And, the longer a student stayed in Chapter I, the lower he/she scored on the California Achievement Tests. While this latter finding might initially seem surprising, one must remember that students who do well are dropped from Chapter I, while those with the most serious academic problems remain within the program. If anything, these data suggest that the Chapter I program in Montgomery County serves the student population it is designed to serve.

The data also indicate that Chapter I students, like their MCPS age peers, improved their scores between the third and fifth grades, as well as between the fifth and eighth grades. This suggests that the impact of program participation does not decline over time. Rather the gains resulting from Chapter I services are sustained and even enhanced by the regular MCPS program.

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10. Since there are no baseline data to indicate the levels at which students started, the scores of different groups presented in these tables should not be interpreted to indicate differential effects of Chapter I on these groups.

TABLE 10-A
California Achievement Tests Scores
by Race, Sex, and Years of Participation in Chapter I:
Kindergarten Cohort
(Mean NCE)

	GRADE 3 (N=311)				GRADE 5 (N=265)			
	Math	Lang.	Read	Total	Math	Lang.	Read	Total
SEX								
Male	50.0	48.7	45.4	47.4	56.7	55.5	51.6	54.8
Female	48.3	53.4	47.3	48.8	54.7	58.9	49.1	53.8
RACE								
White	49.6	53.5	48.2	49.4	54.2	58.2	50.7	54.0
Black	40.8	43.0	39.5	39.8	47.9	47.6	42.9	45.6
Asian	66.9	61.4	56.1	63.4	74.3	71.9	62.1	70.8
Hispanic	52.6	52.5	48.1	50.4	57.3	58.9	53.3	56.7
YEARS IN CHAPTER I								
One	54.4	56.6	49.8	53.4	62.1	62.9	55.0	60.8
Two	50.4	53.1	48.8	49.5	54.1	57.3	50.6	54.2
Three	48.7	51.3	46.9	48.0	54.3	55.4	50.8	52.5
Four	40.5	39.7	38.1	38.7	52.8	52.7	44.2	48.6
Five	39.0	38.2	36.8	37.2	45.3	46.2	40.1	42.8
TOTAL	49.2	50.9	46.3	48.1	55.7	57.2	50.3	54.3
MCPS TOTALS FOR AGE COHORT	67.1	68.0	63.4	67.1	71.2	73.5	66.1	71.7

TABLE 10-B
California Achievement Test Scores
by Race, Sex, and Years of Participation in Chapter I:
Grade 1 Cohort
(Mean NCE)

	GRADE 3 (N=325)				GRADE 5 (N=294)			
	Math	Lang.	Read	Total	Math	Lang.	Read	Total
SEX								
Male	43.1	43.6	42.5	42.2	51.9	52.6	48.3	50.4
Female	44.1	51.0	44.7	45.3	50.0	52.8	47.1	49.6
RACE								
White	44.5	47.4	43.8	44.1	52.7	55.5	50.1	52.1
Black	37.7	42.9	40.2	39.1	45.2	47.0	43.1	44.7
Asian	61.6	63.6	54.4	59.8	63.1	60.4	53.8	59.7
Hispanic	45.1	46.2	45.9	44.6	50.9	50.7	46.0	48.8
YEARS IN CHAPTER I								
One	52.4	55.6	51.4	52.3	57.0	59.8	53.2	56.6
Two	46.9	47.8	44.5	45.7	53.1	55.1	50.9	52.5
Three	43.0	45.7	42.7	42.8	48.2	48.3	42.5	45.7
Four	33.3	39.9	35.9	34.9	46.8	47.9	44.6	45.9
Five	30.8	37.6	35.9	33.0	39.2	42.5	40.6	39.8
TOTAL	43.6	47.0	43.5	43.6	51.0	52.7	47.8	50.0
MCPS TOTALS FOR AGE COHORT	65.2	66.6	62.2	65.5	69.3	71.4	65.6	70.0

TABLE 10-C
California Achievement Tests Scores
by Race, Sex, and Years of Participation in Chapter I:
Grade 3 Cohort
(Mean NCE)

	GRADE 5 (N=365)				GRADE 8 (N=318)			
	Math	Lang.	Read	Total	Math	Lang.	Read	Total
SEX								
Male	46.1	45.1	44.3	44.1	50.4	46.8	47.5	47.8
Female	46.0	48.1	43.4	45.0	50.4	49.5	45.8	48.3
RACE								
White	46.5	47.1	44.6	45.0	51.3	49.2	47.9	48.8
Black	39.6	40.7	40.1	39.3	43.7	42.8	41.5	42.1
Asian	67.0	65.2	50.5	60.2	65.1	53.1	57.7	61.6
Hispanic	53.5	51.5	48.0	50.4	55.6	53.7	48.2	52.2
YEARS IN CHAPTER I								
One	57.1	57.0	54.8	55.9	59.2	55.5	55.9	57.3
Two	49.9	47.8	46.7	47.4	53.1	50.1	49.4	50.3
Three	43.0	44.4	41.0	41.8	47.3	45.4	42.3	44.5
Four	40.6	43.1	38.1	39.4	46.0	45.8	44.2	44.7
Five	37.1	37.8	36.5	35.5	44.6	41.9	41.6	41.7
TOTAL	46.1	46.5	43.8	44.5	50.4	48.1	46.8	48.0
MCPS TOTALS FOR AGE COHORT	65.6	68.0	63.9	66.8	68.3	65.7	64.9	67.4

Criterion-Referenced Tests

The Criterion-Referenced Tests (CRT), administered in MCPS yearly to students in Grades 1 through 8, measure students' performance on the MCPS reading and mathematics curricula. Students are assigned to a test level by teachers (on, below or above grade level) based on guidelines developed by the curriculum specialists. Data from the 1986 CRTs indicate that a substantial portion of the kindergarten and Grade 1 cohort students took these tests at levels below the grades they were enrolled in and that their scores on these tests were often low.

Criterion-Referenced Reading Tests

For those Chapter I students who took the criterion-referenced reading test in the spring of 1986, the average percent correct was 54.9 for students in the kindergarten cohort and 46.1 for students in the Grade 1 cohort. This compares to 66.7 percent correct for the kindergarten age peers and 59.8 percent correct for the grade 1 age peers. Another way to look at the data is that 39.7 percent of the kindergarten cohort students and only 23.5 percent of the Grade 1 cohort students scored 60 percent correct or higher. This is compared to 69.3 percent and 59.8 percent of the students scoring as such in the respective age cohorts. In addition to the high percentages of students in the Chapter I cohorts who scored below 60 percent, 48 percent of the kindergarten cohort students and 42 percent of the Grade 1 students took the test at levels below their current grade level.[11] These figures are over twice that for the age group comparisons. Tables 11-A and 11-B break down the percentage of correct items by whether the test was taken on or below grade level.

Criterion-Referenced Mathematics Tests

Results from those students who took the criterion-referenced math tests in the spring of 1986 also indicate that Chapter I students scored below students in their age cohorts. Whereas the average number of items answered correctly was 53.4 and 57.3 for the kindergarten and first grade Chapter I cohorts respectively, the average was 67.9 for the kindergarten age cohort and 72.1 for the first grade age cohort.

In addition, a substantial percentage of Chapter I students took the tests below grade level and scored below 60 percent correct. Sixty-two percent of the kindergarten cohort students and 56 percent of the students in the first grade cohort took the test below grade level. In the kindergarten cohort, 37.7 percent scored 60 percent or more correct while 44.4 percent of these students in the Grade 1 cohort scored as such. It is the case, however, that 13 of the kindergarten students and 3 of the Grade 1 students took the test above grade level, and all of these students scored above 60 percent correct. Tables 12-A and 12-B present the percentage who scored above 60 percent correct by the level of the test taken.

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11. Students are given the criterion-referenced tests each spring at levels determined by the MCPS Department of Academic Skills and the classroom teacher. Thus, a student in the fifth grade may be taking a criterion-referenced test at the fourth grade level or even lower.

It is also interesting to note that a substantial higher percentage of students tested on grade level scored about 60 percent in math than in reading. There are several possible reasons for such differences -- test difficulty, differential assignment to that level, different student skill levels. The data do not permit us to determine which one or ones may be operating for this group of students.

TABLE 11-A
Criterion-Referenced Reading Test, Spring of 1986
Kindergarten Cohort
(N=302)

	Percentage Correct	
	Less than 60	60 and over
Tested below grade level	74.0	26.0
Tested on grade level	47.1	52.9

TABLE 11-B
Criterion-Referenced Reading Test, Spring of 1986
Grade 1 Cohort
(N=204)

	Percentage Correct	
	Less than 60	60 and over
Tested below grade level	74.1	25.9
Tested on grade level	78.2	21.8

TABLE 12-A
Criterion-Referenced Math Test, Spring of 1986
Kindergarten Cohort
(N=313)

	Percentage Correct	
	Less than 60	60 and over
Tested below grade level	84.6	15.3
Tested on grade level	37.1	62.9
Tested above grade level	0	100.0

TABLE 12-B
Criterion-Referenced Math Test, Spring of 1986
Grade 1 Cohort
(N=198)

	Percentage Correct	
	Less than 60	60 and over
Tested below grade level	82.1	17.9
Tested on grade level	12.5	87.5
Tested above grade level	0	100.0

Maryland Functional Tests

The passing rate for Chapter I students who took the Maryland Functional Reading and Math Tests as ninth graders in the fall of 1985 was similar to that of ninth graders taking the test throughout the state. However, their performance fell below that of other ninth graders taking the test in MCPS.

Those Chapter I students in the Grade 1 cohort who had never been retained would have been in the seventh grade in the 1985-86 school year, and Chapter I students in the third grade cohort would have been in the ninth grade if they had never repeated a grade. Thus, students in both of these cohorts would have taken the seventh grade diagnostic version of the reading and math functional tests and students in the Grade 3 cohort who had not been retained would have taken the state functional reading and math tests as ninth graders.

Table 13 presents the results of the seventh grade administration of the Maryland Functional Mathematics and Reading Tests for the Chapter I first grade cohort and for those students in the age cohort.

TABLE 13
Seventh Grade Maryland Functional Reading and Mathematics Tests:
Grade 1 Cohort

	Mathematics		Reading	
	Chapter I (N=222) %	MCPS (N=5119) %	Chapter I (N=226) %	MCPS (N=5128) %
Less than 320	76.1	32.6	17.7	3.7
320 - 339	15.3	25.0	22.6	8.7
340+ (Passing)	8.6	42.3	59.7	87.6

As is true across the state, scores on the Maryland Functional Reading Test were much higher than scores on the Maryland Functional Math Test. This is true for both Chapter I students and for those students of similar ages in MCPS. Whereas almost 60 percent of the Chapter I students in the Grade 1 cohort scored 340 or better on the reading test when administered in the seventh grade, slightly less than nine percent of these students scored at this level on the math test. For both the reading and math functional tests, however, a considerably lower percentage of Chapter I students received passing scores (above 340) than their age peers.

Students scoring below 320 when tested in the seventh grade are considered to need help in order to pass the test in the ninth grade. Over three fourths of the Chapter I students tested from the first grade cohort would thus be considered to have needed help in math in order to pass the test while less than 20 percent of these students would have needed help in order to pass the reading test.

Many of the Chapter I students in the Grade 3 cohort took the reading and math functional tests as ninth graders in the fall of the 1985-86 school year. These results are presented in Table 14.

TABLE 14
Ninth Grade Maryland Functional Reading and Mathematics Tests:
Grade 3 Cohort

	Mathematics		Reading	
	Chapter I (N=279) %	All MCPS (N=6242) %	Chapter I (N=284) %	All MCPS (N=6188) %
Less than 340	40.5	14.5	6.0	2.2
340+	59.5	85.5	94.0	97.8

In the fall of 1985, 59.5 percent of the Chapter I students received passing scores on the Maryland Functional Mathematics Test and 94 percent passed the Reading Test. While these scores were lower than those of the students of similar ages in MCPS, particularly in math, the passing rate for Chapter I ninth grade students in reading was higher than it was for the state as a whole and the passing rate in math was only a little below that of the state rate.[12]

These results, while encouraging, must be considered in light of the fact that the test scores come from a select group of former Chapter I participants — those who never were retained. As will be noted below, the retention rate for these students is a concern.

Suspensions

The suspension rate for Chapter I students is over twice that of other MCPS students of similar ages. This indicates that a number of Chapter I students experienced behavioral problems while in MCPS.

Data on suspensions of students were available from the 1982-83 school year through the 1985-86 school year. As indicated in Table 15, less than 5 percent of the kindergarten cohort had been suspended during those school years, while 8.6 percent of the students in the first grade cohort and almost 20 percent of the students in the third grade cohort had been suspended. The increase in suspensions in the third grade cohort is consistent with the trend in MCPS for suspensions to increase for students through the junior high level and to taper off after that.

For all three Chapter I cohorts, the suspension rate among Chapter I students was higher than it was for the age cohort as a whole.

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12. The percentages of all students in the state passing the functional tests in the fall of 1985 are: Mathematics, 64.9; Reading, 92.9.

TABLE 15
Suspensions of Chapter I Students

	Kindergarten	Grade 1	Grade 3
Percentage of Ch. I Cohort Suspended	4.3	8.6	19.8
Percentage of Age Cohort Suspended	1.8	3.3	8.9

The Cumulative Records of Chapter I Students

In order to obtain information not available on the MCPS data base or on already existing computer tapes and files, students' cumulative records were reviewed for 99 of the kindergarten and 94 of the third grade cohort students who were still enrolled in MCPS during the 1985-86 school year.[13] This additional information provides further insight into the problems and successes of Chapter I students in MCPS. The data do not, however, allow for comparisons of Chapter I students with their age cohorts and must be interpreted in light of experience and professional judgment. Because the data were extracted from individual student records, it was not possible to extract data for MCPS students of similar ages.

Attendance

Data were gathered on the attendance of Chapter I students for each year that they were enrolled in MCPS. For both the kindergarten and Grade 3 samples, considerable percentages of Chapter I students were absent 20 or more days a year. These data are presented in Table 16.

13. One hundred students from each of the two cohorts were initially selected at random for record reviews. The records of one kindergarten cohort student and six third grade cohort students could not be located.

TABLE 16
Percentage of Chapter I Students Absent More Than 20 Days a Year

	Kindergarten Cohort Sample	Grade 3 Cohort Sample
School Year		
1976-77	-	16.4
1977-78	-	15.2
1978-79	-	13.4
1979-80	33.3	13.6
1980-81	19.2	11.9
1981-82	13.1	8.0
1982-83	14.1	15.3
1983-84	18.4	23.3
1984-85	23.2	25.5
1985-86	21.2	32.9

The data clearly show a trend of increased absenteeism as the students get older. Further, for older students, the absentee rate raises some concerns as approximately 20-30% miss more than 20 days a year. Many of these students can ill afford the lost opportunities for instruction.

Retentions

The data gathered from the record reviews indicate a high percentage of grade retentions for both the kindergarten and third grade samples. Thirty percent of both the kindergarten and the third grade samples had been retained at some point while enrolled in MCPS. Table 17 indicates the grade which was repeated for those Chapter I students who had been retained.

Students in the kindergarten cohort who were not on grade level tend to have been retained in either kindergarten or Grade 1. Twenty-two percent of the sample had been retained at those grade levels. The retentions of students in the third grade sample were more evenly distributed across Grades K

TABLE 17
Grades in Which Chapter I Students Were Retained

	Kindergarten Cohort Sample	Grade 3 Cohort Sample
Grade Retained		
Kindergarten	9.1	3.2
Grade 1	13.1	7.4
Grade 2	7.1	5.3
Grade 3	1.0	4.3
Grade 4	0	3.2
Grade 5	0	4.3
Grade 6	-	0
Grade 7	-	1.1
Grade 8	-	1.1
Never retained	69.7	70.1

through 5. Over half of the third grade retentions occurred before 1979-80, the year from which this cohort was followed.

Grades

Information on students' academic performance as measured by their grades in courses was collected from the students' records. The vast majority of students in the kindergarten cohort sample received an "S" for the courses they took in 1982-83 (third grade courses, if the student was on grade level) and 1985-86 (sixth grade courses). These grades indicate satisfactory performance. It is difficult at the elementary level, however, to determine very much from a student's grades unless he/she is doing extremely poorly or extremely well.

The report card grades of the third grade cohort sample students who were in the ninth grade in 1985-86 tell a different story. The grade point averages (GPA) for these students are presented in Table 18.

Over half of the 80 students in the Grade 3 cohort sample who were in the ninth grade during the 1985-86 school year had GPAs below 2.0. This group does not include students who had been retained between 1979-80 and 1985-86, thus making the percentage of students experiencing academic difficulties even higher. Ten percent of the students in this group did have GPAs above 3.0 and another 11.3 percent had GPAs between 2.5 and 2.99.

TABLE 18
Grade Point Averages of Grade 3 Cohort Sample Students
Grade 9, 1985-86
(N=80)

	Percentage
Less than 2.0	51.3
2.0 - 2.49	27.5
2.5 - 2.99	11.3
3.0 and above	10.0

General Problems

A checklist was used to identify problems faced by Chapter I students while in MCPS. Table 19 presents the percentages of students in the two cohort samples whose cumulative records indicated the problems listed below.

In both samples, the most common problems encountered by these students were academic and work/study problems. Over half of the students in these two groups experienced such problems. Speech and language problems ranked third in both groups, with 37.4 percent of the kindergarten cohort sample and 30.8 percent of the grade 3 sample having had these problems while in MCPS. Listening problems, which ranked fourth in both groups, were experienced by slightly over a third of the students in the kindergarten cohort sample and 28.7 percent of the Grade 3 sample. And, almost a fourth of the students in both groups had social or emotional problems noted in their cumulative folders. Thus, Chapter I students encounter a wide range of problems while in MCPS.

TABLE 19
Percentage of Chapter I Students Encountering Problems
By Problem Area

	Kindergarten Cohort Sample	Grade 3 Cohort Sample
Problem		
Academic	50.5	58.5
Behavioral	28.3	23.4
Attentional	21.2	10.6
Motivation	19.2	17.0
Work/Study Skills	61.6	51.1
Health	1.0	2.1
Listening	34.3	28.7
Motor Skills	14.1	6.4
Social/Emotional	24.2	25.5
Speech/Language	37.4	30.8
Visual/Perceptual	19.2	14.9
Suspension	7.1	20.2
Other	12.1	17.0

Successful Students in Chapter I

Many of the tables in this report have presented either aggregate data or average scores of Chapter I students. While this type of data presentation is useful for obtaining an overall assessment of students who have been in the Chapter I program, it merges together the very poor and the unusually strong student. Of particular interest to a program mandated to serve low-income, low-achieving students are those students who appear to perform well by standard academic criteria.

One indicator of the fact that Chapter I has successfully reached some students is the proportion of students who did well on the California Achievement Tests. On all administrations of these tests, there were some

Chapter I students scoring in the upper percentiles. Table 20 presents the percentage of students in each of the three cohorts who scored above the 75th percentile on each of the subtests as well as on the test as a whole.

TABLE 20
Percentage of Chapter I Students Scoring Above the 75th Percentile on the California Achievement Tests

	Kindergarten Cohort		Grade 1 Cohort		Grade 3 Cohort	
	Grade 3	Grade 5	Grade 3	Grade 5	Grade 5	Grade 8
Reading	11.8	22.6	8.6	15.3	10.4	14.3
Language	24.1	32.1	18.0	22.9	11.8	14.8
Math	18.8	33.8	13.7	20.4	11.2	17.1
Total	15.8	28.2	8.0	18.5	7.1	11.3

The kindergarten cohort appears to have the highest percentages of students who scored at the 75th percentile or higher. Given the difficulties in detecting academic need at the time of kindergarten and the particular problems of the instrument used to determine Chapter I eligibility for kindergarten students in 1979 (see footnote 8), it is not surprising that this occurs.

To obtain a closer look at those former Chapter I students who at least performed well on the California Achievement Tests, several student characteristics were examined for the kindergarten and Grade 3 cohorts. Table 21 presents some of these characteristics for students whose total score was at the 75th percentile or above on the earlier administration of the test. (For the kindergarten cohort students, this would have been the test taken when in the third grade and for the Grade 3 cohort students, this would have been the test taken when in the fifth grade.)

Relative to their participation in Chapter I, Asian students were over-represented among the higher-achieving students. (This was also evident in Tables 10-A, 10-B, and 10-C which presented the mean NCE scores on the California Achievement Tests by race.) It is possible that these students, having language difficulties, were placed in Chapter I for a year or so and this boost was all that they needed in order to perform well in MCPS. It is also possible, however, that these students did not need compensatory services such as those provided in the Chapter I program but rather ESOL or some type of language assistance. Whatever the case may be, Chapter I Asian students outperformed students from other racial groups.

TABLE 21
Selected Characteristics of Chapter I Students Who Scored
At or Above the 75th Percentile on the California Achievement Tests

	Percentage	
	Kindergarten Cohort (N=55)	Grade 3 Cohort (N=26)
RACE		
White	42	46
Asian	40	23
Black	5	15
Hispanic	13	15
YEARS IN CHAPTER I		
One	60	69
Two	27	12
Three	13	19
HEAD START PARTICIPATION		
Yes	27	10*
No	73	89
SPECIAL EDUCATION		
Yes	31	31
No	69	69
SUSPENSIONS		
Yes	0	4
No	100	96
MARYLAND FUNCTIONAL PERFORMANCE (% passing 9th grade test)		
Reading	-	100
Math	-	94

* The reader is reminded of the different sources of data used to determine Head Start participation for students in these two cohorts (see Table 3).

As a whole, the higher-achieving Chapter I students tended to have had one or two years of the program, although over 10 percent of these students in both cohorts had three years of Chapter I. A much lower percentage of these students were in Head Start than students in the two cohorts as a whole, and only one student from both cohorts was ever suspended.

It is the case that almost a third of these students in both cohorts received some special education service while in MCPS. A closer look at the data, however, indicates that the number of these students in special education dropped each successive year. It thus appears that whatever service was needed was not necessary for the long term.

All students in the third grade cohort passed the Maryland Functional Reading Test when they first took it in the ninth grade, and all but one passed the Maryland Functional Mathematics Test on the first administration. These passing rates were higher than those for the state as a whole as well as for MCPS.

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References

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